

## 4. НАСА утверждает, что «прямой эфир с Луны» снят одним непрерывным планом. Но это неправда.

11-14 minutes

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Over the past 20 years, so many new facts (in addition to the already known ones) have been revealed that expose the lunar scam - for example, the replacement of astronauts with dwarfs and even dolls, so many outright "bloopers" and inconsistencies have been discovered - that the old mantras of defenders of NASA deception (that they there were) many are no longer taken seriously. And they began to involve "film experts" in the defense of the lunar falsification. They undertook to prove that "live reports from the Moon" could not have been filmed on Earth in any way, due to their long duration. "Experts" began to declare that besides this, in those years there simply were no ways to slow down the speed of the display, etc.

We will analyze these arguments, and you will see that the invited "experts" are not only poorly versed in cinema and television technologies, but it seems that they have not even seen the subject of discussion itself - they have not seen the recordings of the so-called live reports from the Moon. The articles they wrote under the dictation of NASA are just an attempt to bombard the average reader with pseudo-technical arguments.

Here is one of the ordered articles published on the Yandex.Zen platform, which is a translation from English.

### Film expert fights myths around Apollo 11 mission

There is also a link in the article. [to the original article](#) in English.

The article refers to a certain director Howard Berry, who undertook to refute various arguments of skeptics regarding lunar video materials.

Howard Berry is a real person, making clips for television as a director. Probably, he is an excellent **director** and knows how to work well with actors, but when he starts talking about the technique of filming, it becomes clear that the person is poorly versed in the topic. I would not dwell on his essay (or, probably, on the NASA essay, which he signed with his own name), if these "arguments" were not later cited by other authors as "evidence."

Berry admits that **he is not an expert** in space flight and **he is not an engineer**. He is a filmmaker and lecturer. But, not being an engineer, for some reason he declares: *"I can say with confidence that the footage was impossible to falsify."*

Since I am a cameraman and over 20 years as a teacher in the department " **Kinoteletehniki** " at the Institute of Cinematography (VGIK), I immediately see the author's error when he, in his article tries to discuss the flow of film or work of high-speed cameras.

Here is the "cinema expert" Howard Berry takes the thesis of the skeptics about the fact that "live broadcast from the moon" could have been filmed in advance in the pavilion:

**"They filmed it and slowed it down. Then they converted it to be shown on television."**

and tries to refute it.

The position of the defender of NASA is that it cannot be done. The TV broadcast from the Moon lasts 143 minutes. For such a movie, a lot of film is required. Here's what he writes:

*A standard 35mm reel, at a recording rate of 24 frames per second, will allow you to capture only 11 minutes of timing. Moreover, its length will be almost 305 meters. If you compare that to a movie at 12 frames per second, which is 143 minutes long (this is how long the footage was filmed by the crew of Apollo 11), you need six and a half reels.*

Let's add that "six and a half reels" of 305 meters each is almost 2 kilometers of film.

*"Then you have to put all the pieces together. The stitching will be immediately visible due to the resulting visual artifacts. But we do not observe any of this, which means that the shooting was not conducted on film. "*

The "cinema expert" begins to reason like it seems to be correct, but after the second sentence he was carried away somewhere, he began to incorrectly state the facts, and then completely ended the paragraph with blatant nonsense.

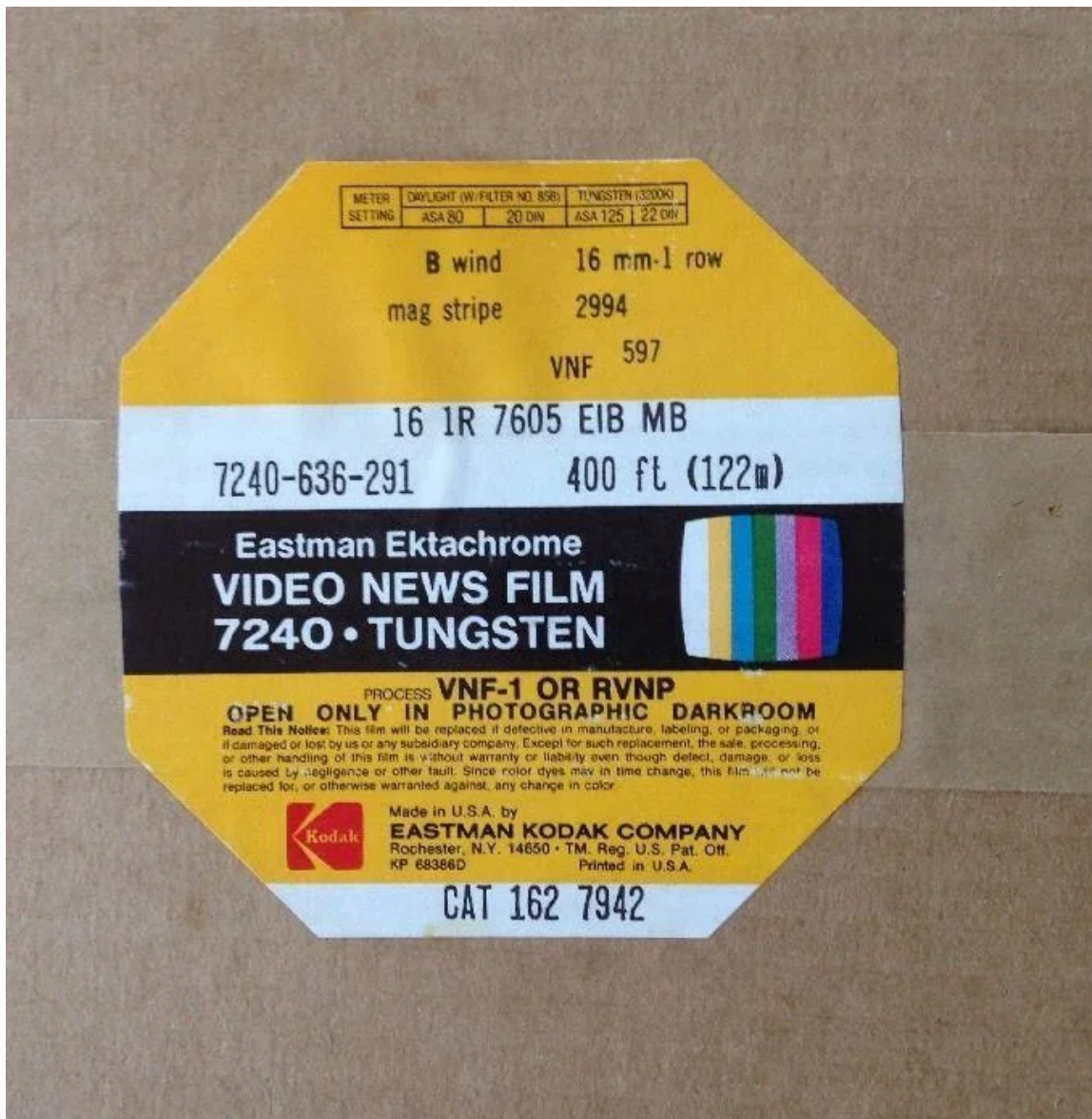
For example, he starts with the fact that everyone knows - a standard box holds 305 meters - it really is: 305 meters is exactly 1000 feet.



Standard box for a roll of film of 305 meters.

The author begins to count how long the film will turn out at 12 fps, but what is this speed? The standard speed of filming is 24 fps. Shooting on the "Moon", according to NASA, was carried out at 10 fps, and then the frames were multiplied using special equipment (which we will discuss separately). And 12 fps - what is it? Where did this number come from? These are some inventions of the author.

And why is the author talking about 35 mm film? This film is used for the filming of films that will be shown in the cinema hall on a giant screen. And the TV screen is very small. And for a small TV on television, they use a different format - film strip with a width of 16 mm. 16mm film was used on television until almost 2000. It filmed reports, it was called VNF (VIDEO NEWS FILM, film for video news). On the label next to the name was drawn a TV screen with a GCP (color stripe generator), and above the name, on a white background, it was indicated that this film was 16 mm wide (16 1R).



16 mm Ektachrom film specially designed for television.

The fact that this film is 16 mm wide is also indicated by the index in the title - 7240, the first digit is "7". For 35mm film, Kodak uses an index starting with "5" (eg 5219, 5247).

Where the author got the 35-mm film from is not clear. It turns out that the author comes up with some things and himself tries to refute his inventions. There was no 35mm film. The Apollo missions used exactly 16mm film.

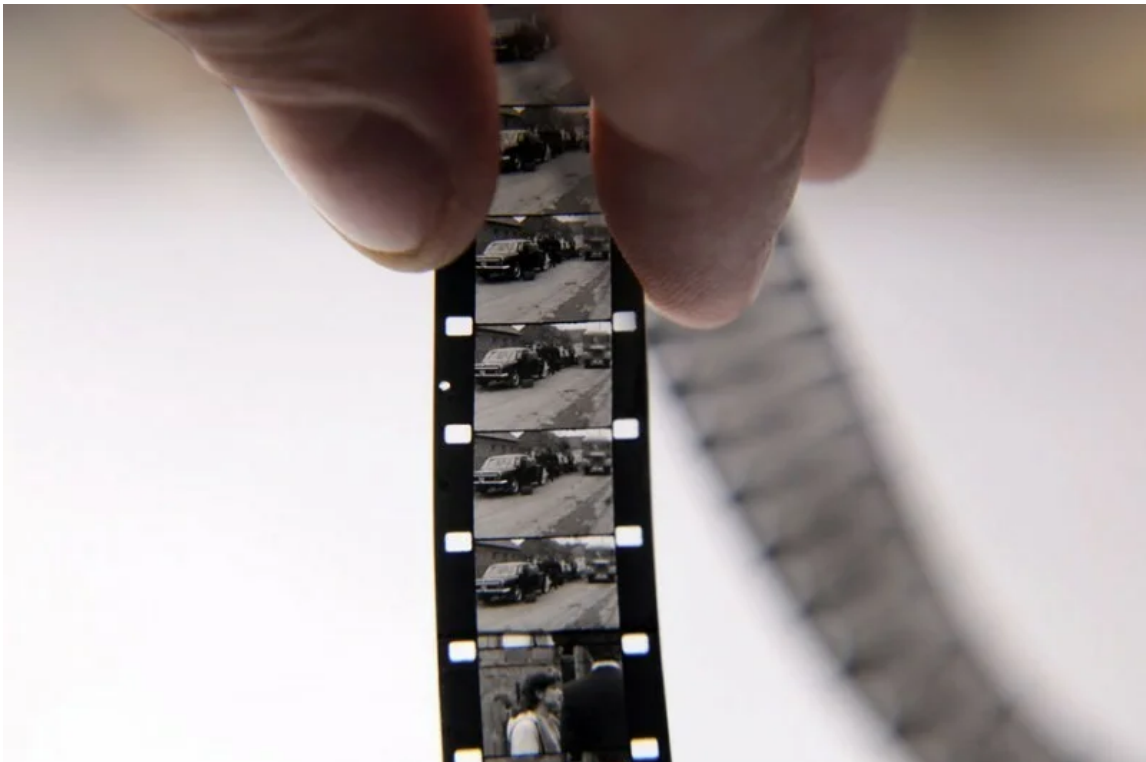




16mm film Ektachrom SO-368 used in the Apollo missions

Let's calculate how many meters of film is needed to shoot a reportage for 143 minutes at a speed of 10 fps (this is exactly the shooting speed that NASA claims).

The height of one frame on such film is 7.5 mm. 1 second of screen time at 10 fps is only 7.5 cm.





The frame height of 16 mm film is 7.5 mm.

To shoot the entire "lunar" reportage, 143 minutes (that's 8580 seconds), you will need 643.5 meters of film.

Those who have seen full-length films are shown on a 16mm film projector know that standard 600-meter reels are used in such cases.



600 meter reels with 16mm film.

In fact, the reel can hold more than 600 meters. So there is no problem in gluing 643 meters of film into one roll and installing such a roll on a movie projector. No **"six and a half bobbins"** are needed , as Howard Berry states, there will be only one bobbin.



16mm film projector with 600m reels.

And now, in more detail about what the "cinema expert" ended the paragraph that we were analyzing.

*"Then you have to put all the pieces together. The stitching will be immediately visible due to the resulting visual artifacts. But we do not observe any of this, which means that the shooting was not conducted on film. "*

The author of the article, Howard Berry, emphasizes that there are no glues in the report from the Moon, that the entire live broadcast, all 143 minutes, was filmed in one continuous shot by a TV camera. Apparently, Berry did not watch live footage at all, since he writes phrases that do not correspond to reality. The entire report from "Luna" consists of small pieces and continuous gluing. And this despite the fact that the shooting (according to the legend of NASA) was carried out by a single TV camera. However, there are more than enough glues.

Of course, NASA somehow explains why, when shooting with a single camera, the image so often changes size, then brightness, then suddenly turns into negative, and the beginning of the live broadcast is generally upside down. These explanations, so fantastic, would be the envy of Jules Verne.

What happened after the start of the live broadcast, I will quote from the article with [habra](#) :

*When Apollo 11 turned on the TV signal fuse, the original signal was switched on from the Goldstone station. And he was upside down! The staff simply forgot that the camera on the lunar module is upside down, and they need to turn on a special inverter. For thirty seconds the operators in Houston waited for Goldstone to figure out how to switch one toggle switch, but, without waiting, they turned the image over*



*in their place.*

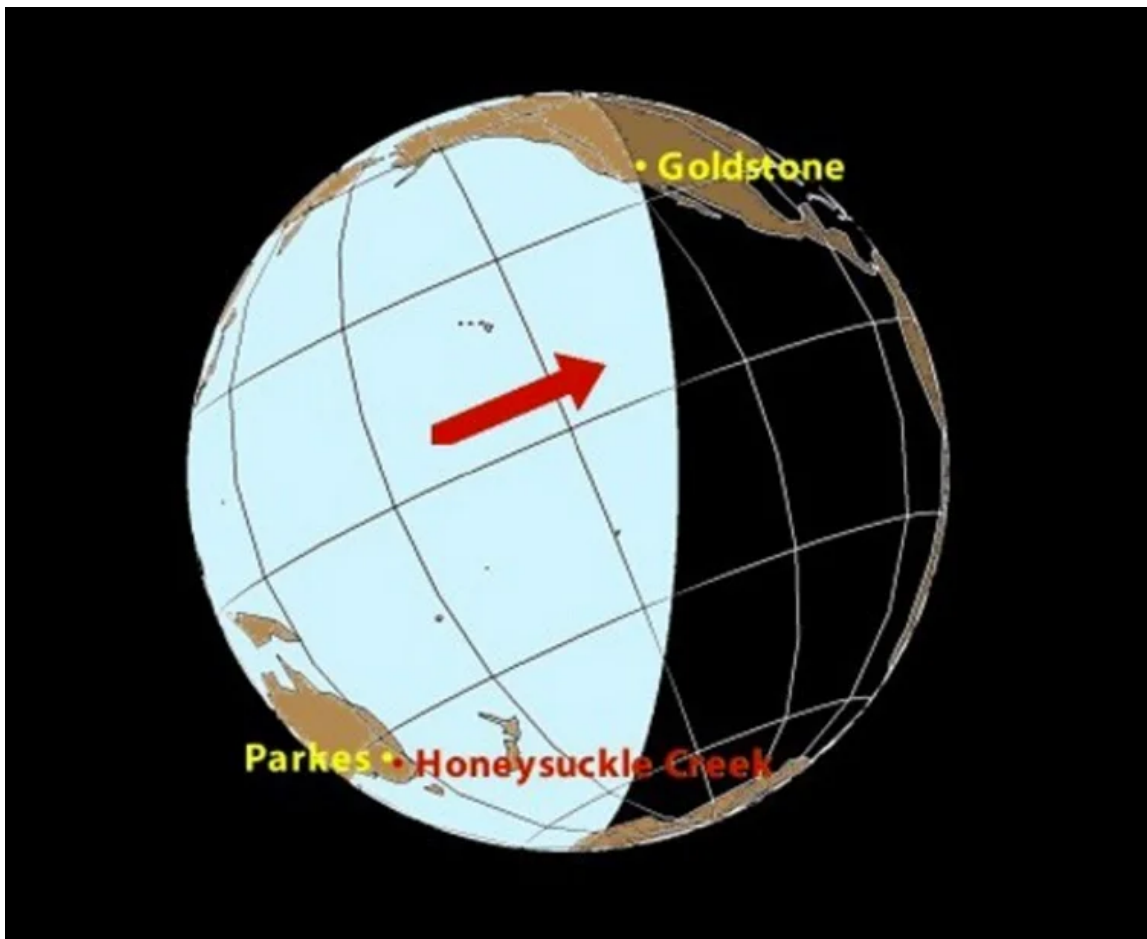
*Then the operators, according to NASA, choosing the best version of the show, switched the broadcast from one station to another.*

Let's try to calculate how many plans and "splices" were in the live broadcast (as shown by the American channel CBS), taking the very beginning of the live broadcast as "zero" in time.

1.00:00 - The broadcast starts, the image is turned upside down. According to NASA legend, California, Goldstone (USA) receives the signal.



The beginning of "live" was upside down



Radio telescopes of Australia and the USA, which, according to NASA legend, received a signal from the Moon

2.00:28 - Gluing. The image is inverted (the image is dark).



3. 01:40 - Gluing. The image has become light. NASA explains this by switching to the signal from the Honeysuckle Creek radio telescope from Australia.

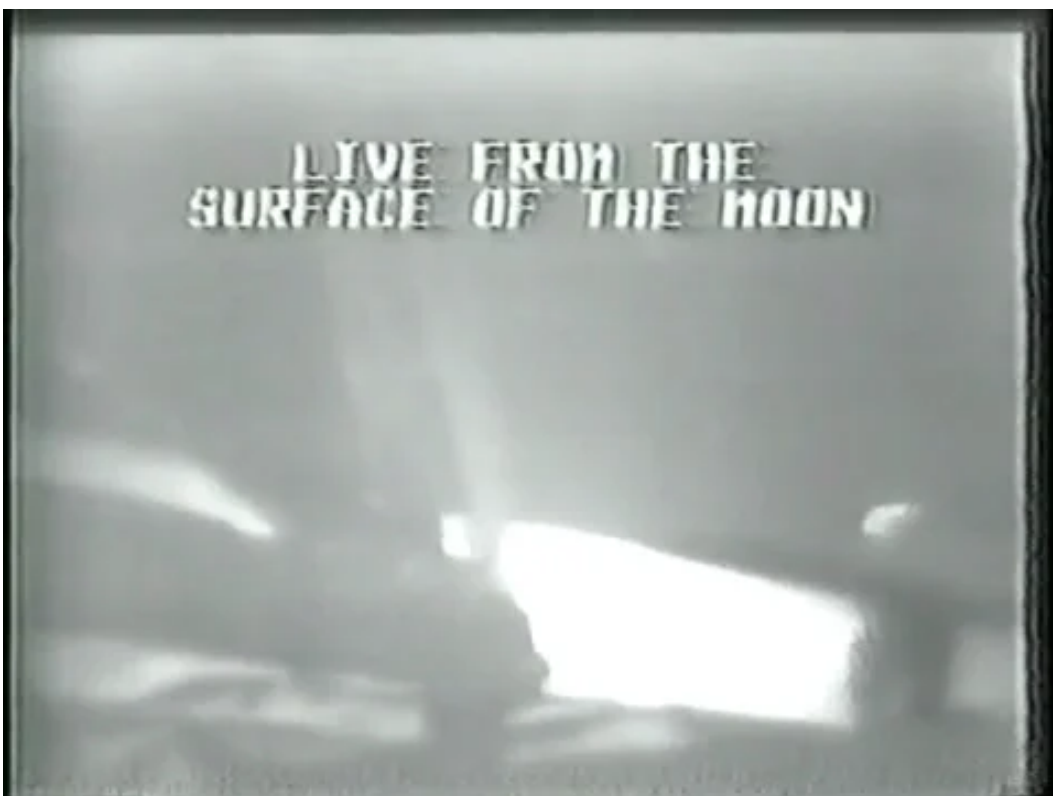




04:44 - Gluing. Switched to negative image (According to NASA, this is a signal from Goldstone, California). For a whole minute, we see only the negative.



05:38 - Gluing. A positive image appeared.



06:50 - Gluing. The image has become darker.





7. 08:52 - Stitching. The image has become lighter.

8.26: 11 - Gluing. The image turned upside down. Allegedly, in a split second, the TV camera was removed from the lunar module and turned with the handle downward, fixing it on a remote tripod. Image upside down.

9. 26:37 - Gluing. The image is rotated 180 degrees.

10.29:09 - Gluing. Unexplained exposure of the entire frame. Darkness for 11 seconds. And again the flare. Darkness again.

11.29:30 - Bonding. Exit from blackout. The size has changed.

12. 33:04 - The camera is swinging. The image disappears and appears.

13. 33:25 - In the frame, only legs (upside down).



14. 33:35 - Darkness. The beginning of the "moon walk" with a camera in hand. Only a blurry blur in the overmodulation is visible. We see this swaying spot within 2 and a half minutes.



15. 36:30 - Something similar to the lunar module appears. Offsetting the frame to a meaningless spot of light. For 3 minutes we see again only a blurry spot.

16.41:00 - The TV camera stopped dangling. Overall plan.





17:43:05. Gluing. A **blue** field appears in the frame , then a scale of tones from black to white. Where did this scale come from on the moon?

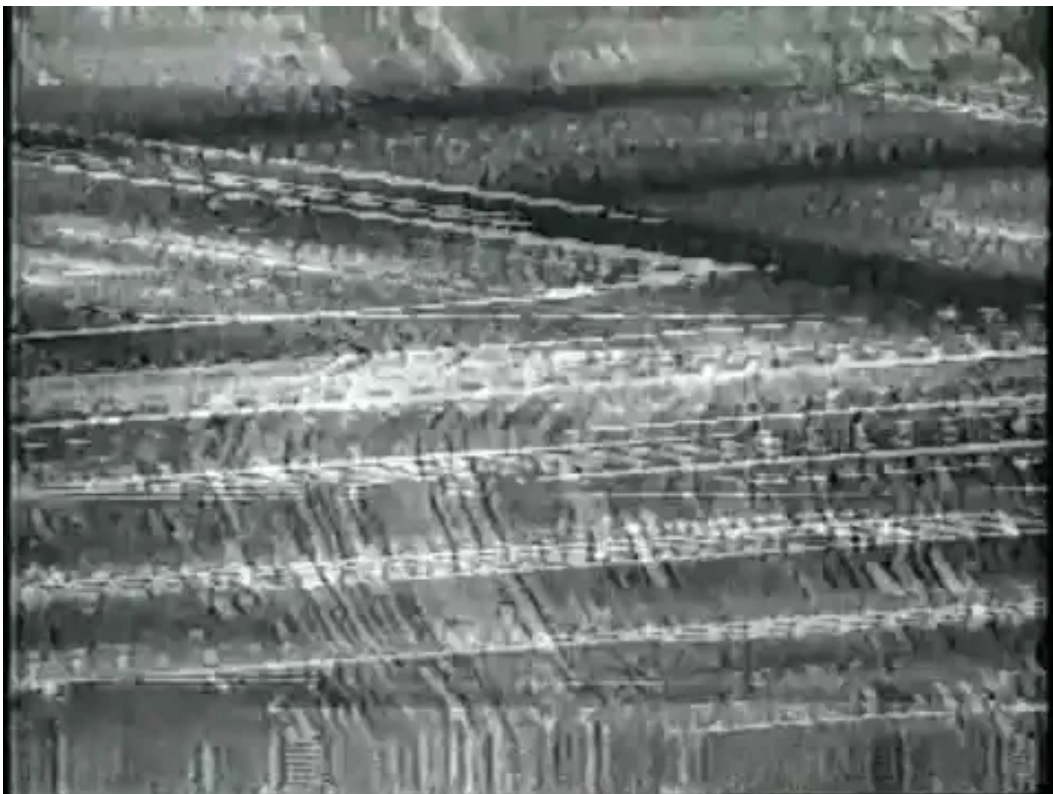


18:43:10 - The image is restored. Setting the flag.



19. 1:34:23 - Gluing. 19 dark frames with noise. An image appeared. It became brighter.

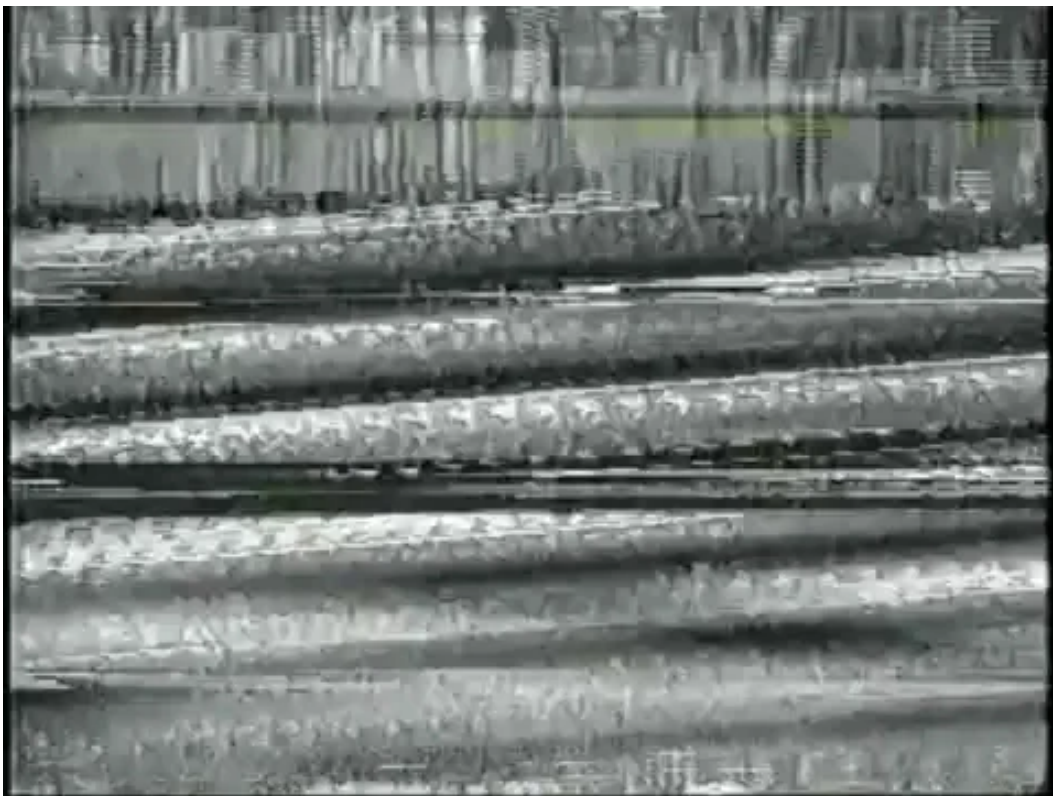
20. 1:54:43 Interference. Nothing is visible except for the horizontal stripes. An image appears.



21.2:01:01 - Again interference. The image is restored.



22.2:01:30 - More interference. The image is restored.



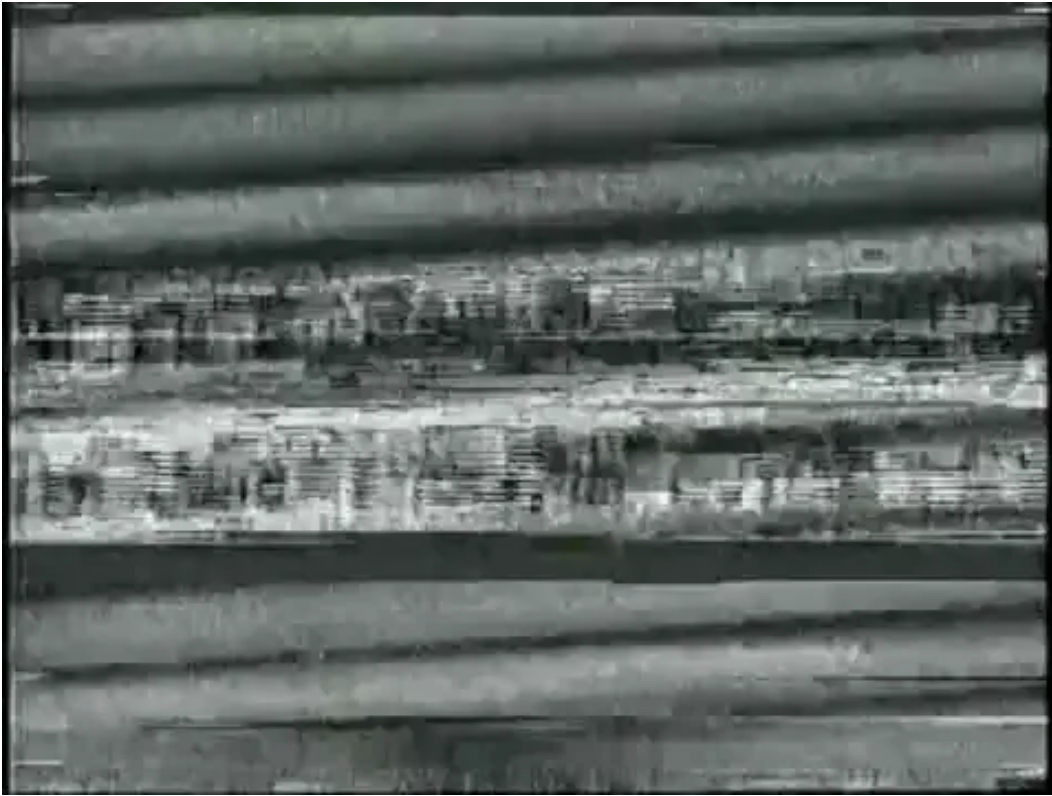




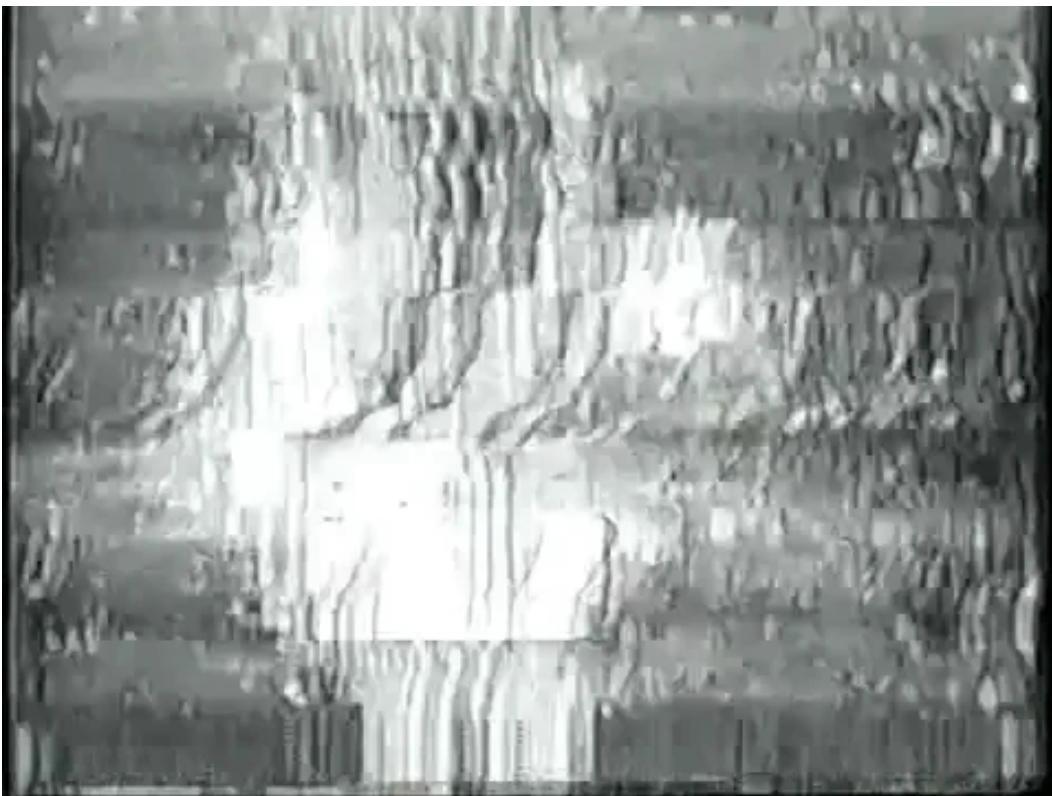
23. A minute later, there is more interference.



24. 2:18:23 - 16 minutes pass and again there is interference.



25. 2:19:38 - After 3 minutes, interference reappears.



The entire "live reportage" is accompanied by artifacts that appear every now and then - noises, flares, blackouts, frame distortions - there are a lot of them, but the author of the article does not even know about it.

*"The stitching will be immediately visible due to the resulting visual artifacts. But we do not observe any of this, which means that the shooting was not conducted on film. " - That's what Berry writes.*

We counted **more than** 20 places where there are or may be gluing, but the author did not see a single one. He probably didn't even watch the Apollo 11 live coverage. Probably, he did not have enough

patience and endurance, or it was a pity to spend two and a half hours of his time watching tedious cloudy video images. Most likely, he signed without looking at an article written by someone at NASA. We understand it: it is unbearably difficult to look at blurry light spots and on barely moving dwarfs for 2.5 hours.

We wrote "dwarfs" because we know that very small actors played the role of Armstrong and Aldrin in the TV report. This was our [previous article](#) .

End of the 1st part.

\*

Camerman L. Konovalov was with you





Lecture for cameramen. In the background behind is a movie camera, which shoots simultaneously on two films.

Until next time!

